#### AGRICULTURAL SECTOR

# CRITERIA FOR TECHNICAL AND ECONOMIC FEASIBILITY REVIEW BY THE DEPARTMENT OF WATER RESOURCES

#### I. ELIGIBLE PROJECTS MUST:

- 1. Be conducted within the state of Idaho.
- 2. Demonstrate the ability to conserve energy or the use of renewable energy.
- 3. Utilize existing, reliable technologies.
- 4. Meet federal and state air and water quality standards.
- 5. Be for existing buildings (retrofits only).

## **ELIGIBLE PROJECTS**

- 1. Retrofits of existing irrigation systems.
- 2. New irrigation systems where land has been flood irrigated or dry-farmed. (New irrigation systems to be installed on lands not previously farmed are not eligible.) The new irrigation system must meet all the energy-efficient criteria established by the Department to be eligible for funding.
- 3. Energy-efficient lighting systems (luminaires) and occupancy/daylight sensors in new construction of farm buildings and related structures.

## II. INELIGIBLE PROJECTS INCLUDE:

- 1. New construction. (Exceptions: The use of renewable energy resources in new construction may be eligible. A separate criteria sheet which discusses renewable resource projects is available upon request. Lighting systems in new construction in 3. above are eligible.)
- 2. Refinancing of existing projects or loans.
- 3. Projects already in progress or completed.

#### III. SIMPLE PAYBACK PERIOD

1. Improvements must show an estimated payback period of 10 years or less based on dollar savings calculated by the Department. (A \$1,500 project must save at least \$150 in energy per year.)

## IV. LOAN TERMS

- 1. The interest rate is 4%.
- 2. Repayment of the loan is 5 years or less. (The repayment period is not the same as the simple payback period.)
- 3. The loan maximum is \$100,000.

## V. PROJECT APPLICATION FORMS

 Application forms are available directly to the potential borrower from the Department. Forms may be requested in person, by mail, or by calling the Department's toll-free Idaho Energy Hotline, 1-800-334-SAVE. An application worksheet is available on the World Wide Web: http://www.idwr.state.id.us/idwr/info/forms.htm

## VI. ADDITIONAL CRITERIA

- 1. The applicant must complete the credit application process and begin installation of energy conservation improvements within 90 days following approval of project by the Department. After 90 days a new application is required.
- 2. Water rights information must be provided for ascertaining legal compliance with water rights requirements, where applicable.
- 3. The applicant must be the direct user/benefited of projects funded by this program. (Income properties are eligible in the Commercial Sector.)
- 4. The Department will not subordinate its lien position.

#### VII. LOAN APPLICATION PROCESS

- 1. Complete and return application form to the Department of Water Resources, P.O. Box 83720, Boise, ID 83720-0098.
- 2. Department staff will review the project for economic and technical feasibility. Applicants will be notified in writing of decisions of staff and the Agricultural Loan Committee based on the analyses of economic and technical feasibility.
- 3. Department staff will prepare a credit analysis based on financial information submitted by the applicant.
- 4. The Agricultural Loan Committee will make the credit decision.
- 5. Invoices for all completed projects must be submitted to the Department. The installed project (invoice) must match the application project (bid) before funds will be disbursed.
- 6. A UCC-1 filing or mortgage will be placed on the items purchased with the loan.
- 7. If approved, payment amount and schedule will be calculated and promissory notes and any necessary security agreements will be provided for applicants' signatures.
- 8. Funds will be disbursed after signed documents are received.

OTHER CHANGES MAY OCCUR AS NECESSARY. Updated and effective January 22, 2003.

## LOAN PROGRAM GUIDELINES FOR NEW IRRIGATION SYSTEMS

The following requirements must be met before any project will be considered for financing:

- 1. Systems must have maximum design application flow rates of not more than 8.0 gpm/acre.
- 2. Efficiencies at normal design flow and head for pumps 50 horsepower or larger must be no less than 80%.
- 3. Mainline velocities must not exceed 5 ft/sec at any point under normal operating conditions. Economical pipe sizing by IDWR staff may be required.
- 4. Fittings and valves must be the same size as the mainline for sizes up to twelve inches, and for sizes larger than twelve inches may be one size smaller.
- 5. Lateral friction loss must not exceed 11 psi per 1/4 mile.
- 6. Hand line, wheel line and solid set systems must have nozzle pressures of no more than 40 psi at the most critical point in the system during normal operating conditions.
- 7. Pivots, linear, and drip systems must have pressures no greater than 25 psi before any pressure regulating device, and no more than 20 psi at the nozzle, at the most critical point in the system.
- 8. End guns may be used only in conjunction with dedicated end gun booster pumps.
- 9. For systems with mixed methods of irrigation (e.g., pivot and hand lines), all criteria listed here must be met as applicable to each particular method of irrigation.
- 10. All mainline must be PVC unless certain design factors are prohibitive.
- 11. New motors for horizontal centrifugal pumps must be "high efficiency" and meet or exceed NEMA 12-6C standards.
- 12. New motors for horizontal centrifugal pumps must be "high efficiency" and meet or exceed NEMA 120-6C standards.
- 13. A structure must be provided to shade all electrical panels and motors larger than 15 horsepower.
- 14. Items which can specifically be financed include the following:

Well pumps
Booster pumps
Suction & discharge pipe
Suction screens, strainers and filters
Mainline

Pump motors

Concrete pump bases

Electrical panels and controls

Pump and pivot wiring

Pump shade structures

Valves

Risers

Pump fittings

Wheel lines

Hand lines

**Pivots** 

Sprinkler heads

Pressure regulators

Nozzles

Drop tubes

Pivot offset booms

**Excavation costs** 

Installation costs

End guns

Variable speed drives and multiple pump installations will be considered on a caseby-case basis.

# Items which cannot specifically be financed include the following:

Well drilling

Well casing

Well screens

Filter systems installed downstream of the pump

Engineering or design costs

Contingencies

Backup pumps

Power line extensions on the utility side of the meter

Used equipment

## \*\*\*\*\* NOTICE TO IRRIGATION LOAN APPLICANTS \*\*\*\*\*\*

If you wish to have your loan application reviewed in a timely manner, please submit the application to IDWR as soon as possible. You can greatly reduce the time required for review of your application by submitting all of the requested information. Due to the number of applications expected between February and the start of the irrigation season, we cannot guarantee anything less than a 60 day turn-around time once the application is judged complete. Please plan accordingly. We will, of course, process applications more quickly if possible. Applications will be reviewed in the order received. If you need design assistance, or if you cannot provide all of the information listed on the new irrigation system guidelines, review of your application will take longer.

Program rules require that work not begin on any project until <u>after</u> your application has been received by IDWR. You may begin construction once the application has been received; however, if you begin work before the loan has been approved, you are proceeding at your own risk since the loan could eventually be denied. To be completely safe, you may wish to not begin construction until after the loan is approved.

Guidelines for new irrigation projects are summarized on the attached sheets. Please review the guidelines carefully before designing new systems. You are strongly encouraged to contact IDWR prior to filling out a loan application so that we may make a preliminary determination of whether your proposed project fits the guidelines of the loan program. Call Warren Weihing at IDWR (208-327-7961) if you have questions about the guidelines or if you need design assistance.